Addressing Diverse Online Learner Needs and Motivation with the Read, Reflect, Display, and Do (R2D2) and TEC-VARIETY Models

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What if our minds were on fire for learning?

John Dewey (Author of "How We Think" and "Democracy and Education")

Ivan Illich (author of "Deschooling Society")

Shephen Heppell (co-developer of Notschool.net and the ULTRALAB)

John Seely Brown (author of "Minds on Fire" and The Social Life of Information)
Allan Paivio, Dual Coding Theory

Richard Mayer, The promise of multimedia learning: Using the same instructional design methods across different media.

Model of Teaching and Learning Through CMC (Gilly Salmon)

What is the Interaction Rationale?
(per Ellen Wagner)
- Interaction is the most debated construct in the world of technology mediated learning design and development.
- In these settings, interaction is the defining attribute of the quality and value
- Interactivity (equated with interaction) is the most expensive component of a technology mediated learning design.

Michael G. Moore, Types of Interactions Possible
1. Learner-Instructor
2. Learner-Learner
3. Learner-Content

4a. Learner-Self: highlighted the importance of 'self talking', or internal dialogue when engaging with learning materials (Soo & Bonk, 1998)
4b. Learner-Interface: The learner's ability to use the communication medium facilitating the online course (Hillman, Willis, & Gunawardena, 1994)

Curt Bonk and Jack Cummings
Matrix of Web Interactions

Instructor to Student: Syllabus, notes, feedback.
- to Instructor: Course resources, syllabi, notes.
- to Practitioner: Tutorials, articles, news.

Student to Student: Comments, sample work, links.
- to Instructor: Votes, tests, papers, evals.
- to Practitioner: Web links, resumes, reflections

Practitioner to Student: Internships, jobs, e-fieldtrips
- to Instructor: Opinion surveys, feds, listservs
- to Practitioner: Forums, listservs, prof dev.

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Part I. Some Online Motivational Ideas

Ok, Million Dollar Question: How do you motivate online learners? What Words come to mind?

Intrinsic Motivation
"...innate propensity to engage one's interests and exercise one's capabilities, and, in doing so, to seek out and master optimal challenges (i.e., it emerges from needs, inner strivings, and personal curiosity for growth)


I even reflected on this for a moment...and then something magical happened...

Model #1: TEC-VARIETY Model for Online Motivation and Retention
1. Tone/Climate: Psych Safety, Comfort, Belonging
2. Encouragement, Feedback: Responsive, Supports
3. Curiosity: Fun, Fantasy, Control
4. Variety: Novelty, Intrigue, Unknowns
5. Autonomy: Choice, Flexibility, Opportunities
6. Relevance: Meaningful, Authentic, Interesting
7. Interactive: Collaborative, Team-Based, Community
8. Engagement: Effort, Involvement, Excitement
9. Tension: Challenge, Dissonance, Controversy
10. Yields Products: Goal Driven, Products, Success, Ownership

Task
- Ideas definitely Can Use (Circle or write down)
- Ideas you might use (check off or write down in a separate column)
- Ideas you cannot use (cross off or put at the bottom)
1. **Tone/Climate: Social Ice Breakers.** A. Eight Nouns Activity
   - Please describe yourself with 8 nouns and explain why these nouns apply to you. Also, reply to 2-3 peers in this class on what you have in common with them.

2. **Encouragement, Feedback, etc.:**
   - **A. Wikibook Critique**
     - Ask students to critique a wikibook or page from Wikipedia

3. **Tone/Climate: Social Ice Breakers.** B. Accomplishment Hunt
   - a. Post to a discussion forum 2-3 accomplishments (e.g., past summer, during college, during life);
   - b. Students respond to each other as to what have in common or would like to have.

4. **Tone/Climate: Social Ice Breakers.** C. Goals and Expectations Charts
   - What do you expect from this class, lesson, workshop, etc., what are your goals, what could you contribute?

5. **Tone/Climate: Social Networking Group (Myspace, Facebook, LinkedIn)**

2. **Encouragement, Feedback, etc.:**
   - **B. Online Chemistry (e.g., virtual lab from Oxford)**

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6/26/2010
3. Curiosity, Fun: A. Online News Coverage
Online News Coverage
Ray of hope in Afghanistan; Greg Mortenson is educating the children of Afghanistan one school at a time. (CNN's Christiane Amanpour)

3. Curiosity, Fun: B. Online Séance or Roundtable
- Convene when dark (sync or asynchronous) and invite guest from other campuses.
- Present current day problem to solve
- Participate from within characters (e.g., read direct quotes from books or articles) and debrief.

3. Curiosity, Fun: C. Google Sky from the Hubble

3. Curiosity, Fun: D. Tour a Museum
(e.g., British Museum, Smithsonian, Louvre)

3. Curiosity, Fun: E. Virtual Archaeology
(e.g., ARCHAVE from Brown University)

4. Variety, Novelty: A. Global Game Jams, Electronic Computer War Games, etc.
5. Autonomy, Choice: A. Follow People using Twitter (microblogging)

6. Relevance, Meaningfulness: A. Tour an Oil Drilling Site (i.e., BP)

6. Relevance, Meaningfulness: B. Design Mock Tour Packages

7. Interactive, Collaborative: A. Online Role Play Exercise for Renewable Energy (Tulane University, Freeman Sch. of Business, roles include power traders, electric utility analyst, independent power producers & utility dispatchers)

7. Interactive, Collaborative: B. Top Business School Online Competitions (teach energy trading, e.g., Tulane Freeman School of Business)

7. Interactive, Collaborative: C. Google Groups (e.g., accounting clubs, computer programming, etc.)
7. Interactive, Collaborative: D. Global Project Collab Teams
(Columbia University engineering and computer science student collaboration with the Indian Institute of Technology Madras, the Helsinki University of Technology (HUT), the University of Twente in the Netherlands)

John E. Taylor, Director of the Project Network Dynamics Lab

7. Interactive, Collaborative: E. Cross-Cultural Rhetoric (CCR) Project (writing, blogging, videoconferencing to build intercultural competence, Stanford U and universities in Sweden, Singapore, Russia, Egypt and Australia)

8. Engagement, Effort: A. Global Videoconferencing

8. Engagement, Effort: B. Online Psychology Experiments

9. Tension, Challenge, etc.: A. Online Role Play of Famous People, Mock Trial, Debates, etc.
- Enroll famous people in your course
- Students assume voice of that person for one or more sessions

9. Tension, Challenge, etc.: A. Global Teams Solving Cases and Challenges
10. Yields Products, Goals:
A. Movie Festivals, Concept Maps, Video Blogs, Virtual Timelines, Digital Movies

10. Yields Products, Goals:
B. Scapblog (post video and photomedia work)

Now for the big questions...!!!
99 Second Reflection!!! Jot down 3 things you learned.

II. Addressing Diverse Learners

Model #2: The R2D2 Model
The R2D2 Method
1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)

Dean of IU School of Education

Why Address Learning Styles?
- Promotes reflection on teaching
- Move from just one mode of delivery
- View from different viewpoints
- Offer variety in the class
- Might lower drop-out rates
- Fosters experimentation

The Blending of Learning Styles

1. Auditory or Verbal Learners
- Auditory and verbal learners prefer words, spoken or written explanations.

Podcast Questions
1. Who has listened to a podcast?
2. Who listens to a certain podcast on a regular basis?
3. Who has created a podcast?
4. Who has created a vodcast?
5. Who thinks podcasting is simply more talking heads?
Read 1a. Ask students to relisten and reflect on particular NPR shows (e.g., iPad April 2010)

Read 1b. Listen and Reflect on Book Author Podcasts

Read 1c. Student and Instructor Cross-Cultural Blog Posts

Read 1d. Read Language Blogs (e.g., "The Spanish Blog")

Read 1e. Readings All Web Resources
  - Rely solely on Web resources.
  - Let students select.
  - Turn in final reflection papers.

2. Reflective and Observational Learners
  - Reflective and observational learners prefer to reflect, observe, and watch learning; they make careful judgments and view things from different perspectives
Blogging Questions
1. Who has a blog?
2. Who regularly reads other people's blogs?
3. Who assigns blogging tasks?
4. Who has created a video blog?
5. Who thinks it is an utter waste of time to blog?

Reflect 2a. Read and Reflect on Blogs in Specific Disciplines

Reflect 2b. Write Book Reviews in LibraryThing: The World's Largest Online Book Club (you can be a "thingamabrarian," 1,000,000 users)

Reflect 2c. Reflect on Podcast from Portals (e.g., Podcast Alley, Podcast.com, EPN Network, etc.)

Reflect 2d. Reuse Blog Posts, Chat Transcripts, Interviews, Online Presentations

Reflect 2e. Videos on Book Websites (e.g., Brain Rules, John Medina)
Reflect 2f. Reflect on Shared Online Video (e.g., MIT World)

Reflect 2g. Professional Development Videos (e.g., STARLINK from Dallas)

Reflect 2h. Webstreamed Lecture Reflections
- Students to watch weekly lectures.
- Reflect on key concepts.

3. Visual Learners
- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Display 3a. Find Open Source Photography (e.g., Flickr)

Display 3b. Visual Resources (e.g., Periodic Table of Visualization; Visual Thesaurus)
Display 3c. Broadcast Surgeries

Display 3d. Timeline Tools (e.g., SMILILE from MIT, Learning Tools from UBC)

Display 3e. Big Think (short topical videos from famous people)

Display 3f. TED Conference Videos (Technology, Entertainment, and Design)

Display 3g. University Shared Online Video and Podcast Portals

Display 3h. University YouTube Channels
4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process through role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

Wiki Questions

1. Who regularly reads Wikipedia articles just for fun?
2. Who regularly reads Wikibooks?
3. Who seeks Wikipedia for content?
4. Who has edited or written new articles on Wikipedia or Wikibooks?
5. Who thinks it is ok for college students to cite from Wikipedia?

Do 4a. Student Work in a Wiki

(e.g., Wet Paint, a free wiki tool for online collaboration; e.g., medical education)

Do 4b. Anchor Creators

Students create their own YouTube videos to illustrate course concepts.

Do 4c. Anchor Creator Interviews

Students find YouTube videos relevant to course concepts and interview the creator about the purpose and potential uses of the video or perhaps request that the creator join the class in a synchronous chat.

Do 4d. Online Poetry and Sonnets

Using Online Video (e.g., YouTube) to Memorize Sonnets and Poems
Do 4e. Paired Article Critiques in a Blog (Students sign up to give feedback on each other’s article reviews posted to their blogs.)

<table>
<thead>
<tr>
<th>Article</th>
<th>Student Critique</th>
<th>Student Peer Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>Dave Jones</td>
<td>John Smith</td>
</tr>
<tr>
<td>Item 2</td>
<td>Emma Brown</td>
<td>Lisa Taylor</td>
</tr>
<tr>
<td>Item 3</td>
<td>Alex Johnson</td>
<td>Sam Adams</td>
</tr>
<tr>
<td>Item 4</td>
<td>Tara Green</td>
<td>Peter White</td>
</tr>
<tr>
<td>Item 5</td>
<td>Max Thomas</td>
<td>Emily Brown</td>
</tr>
<tr>
<td>Item 6</td>
<td>Sam Brown</td>
<td>John Doe</td>
</tr>
</tbody>
</table>

Do 4f. Create Cases and Video Scenario Learning

Do 4g. Interactive Online Accounting

Do 4h. Student Generated Podcasts and Reflections
- Ask students to create a podcast show.
- Write reflection papers on how it went.

Stand and Share Ideas
- Will Work: ___________
- Might Work: ___________
- No Way: ___________

Try the R2D2 Method!!!
Try TEC-VARIETY!!!
Sample papers at: http://www.publicationshare.com/
Archived talks at: http://www.trainingshare.com/